

Upon completion of the project, truck-mounted attenuators that are paid for by each unit shall become the property of the state unless otherwise noted on the plans. Truck -mounted attenuators paid for on a sign day basis shall remain the property of the contractor unless otherwise noted on the plans

Payment for one sign day will constitute payment for the furnishing, operating, and maintaining one acceptable truck mounted attenuator for one day.

876.05. METHOD OF MEASUREMENT.

The quantity of *truck mounted attenuators* to be paid for by each unit will be the maximum number of truck mounted attenuators placed and in use at any one time during the life of the project.

The quantity of *truck mounted impact attenuator replacement packages* to be paid for will be the actual number of replacement packages which have been utilized during the life of the project, unless otherwise stated in the plans.

876.06. BASIS OF PAYMENT.

Truck mounted impact attenuators will be paid for at the contract unit price for “Truck Mounted Impact Attenuators.”

Truck Mounted Impact Attenuator Replacement Packages will be paid for at the contract unit price for “Truck Mounted Replacement Package.”

Accepted truck mounted attenuators, measured as provided above, will be paid for at the contract unit price as follows:

- (A) TRUCK MOUNTED ATTENUATOR EACH
- (B) TRUCK MOUNTED ATTENUATOR REPLACEMENT PACKAGE EACH
- (C) TRUCK MOUNTED ATTENUATOR SIGN DAY

Such payment shall be full compensation for furnishing all material, equipment, labor and incidentals to complete the work as specified.

SECTION 878 MODULAR GLARE SCREEN

878.01. DESCRIPTION.

This work shall consist of (1) furnishing materials and (2) installing modular glare screen units on concrete median barrier—in accordance with these specifications and in reasonably close conformity with the lines, dimensions, and locations shown on the plans or established by the Engineer.

878.02. MATERIALS.

The modular glare screen, as described herein, shall be 10 feet (3.05 m) in length and shall consist of glare screen blades, a flexible base rail, mounting brackets with hardware, and an anchor bolt system.

The modular glare screen blade and base rail shall be manufactured from frangible or flexible light weight material to prevent the possibility of penetration through the windshield of vehicles traveling at high speeds in the event that blades and/or base rail should inadvertently detach from the barrier wall. Modular glare screen shall meet the following physical requirements.

(a) **Modular Glare Screen Blades.**

	<u>Minimum</u>	<u>Maximum</u>
weight	_____	0.9pounds/foot (1.30 kg/m)
width	4 1/2 inch (115 mm)	6 inch (150 mm)
specific gravity	0.90	1.70
tensile strength	2900 psi (20,000 kPa)	_____

The modular glare screen blades shall be green in color similar in appearance to Federal Standard Number 595-34227.

(b) **Base Rail.**

	<u>Minimum</u>	<u>Maximum</u>
weight	_____	1.4 pounds/ft (2.00kg/m)
width	4 1/2 inch (115 mm)	6 inch (150 mm)
rail tensile strength	2900 pounds (20,000 kPa)	_____

Securely fasten each section of base rail to the barrier wall in at least three locations. The connections shall have a pullout strength of at least 2900 psi (20,000kPa) and a shear strength of at least 2900 psi (20,000kPa).

(c) **Weatherability.** Glare screen blades and base rail shall retain mechanical properties over a temperature range of -40°F and 150°F (-40° C and +65° C) and show minimum degradation after 3,000 hours in a weatherometer.

(d) **Certification.** A Type D materials certification shall be furnished in accordance with Subsection 106.04.

878.04. CONSTRUCTION METHODS.

Install all component parts of the units in accordance with the Plans and the manufacturer's specifications.

878.05 METHOD OF MEASUREMENT.

The quantity of each *modular glare screen* units will be measured by the number of units installed. Modular glare screen may also be measured by the linear foot (meter).

Upon completion of the project, modular glare screen paid for by each unit shall become the property of the state. Modular glare screen paid for on a sign day basis shall remain property of the contractor. Payment for one sign day will constitute payment for the installation and maintenance—including replacing any damaged or broken parts—of one 10 foot (3.05 m) section of glare screen for one day.

878.06. BASIS OF PAYMENT.

Accepted modular glare screen units, measured as provided above, will be paid for at the contract unit price as follows:

- (A) MODULAR GLARE SCREEN EACH
- (B) MODULAR GLARE SCREEN LINEAR FOOT (METER)
- (C) MODULAR GLARE SCREEN SIGN DAY

Such payment shall be full compensation for furnishing all materials, equipment, labor, and incidentals for the installation of the glare screen modules.

SECTION 880

CONSTRUCTION SIGNING AND TRAFFIC CONTROL

880.01. DESCRIPTION.

This work shall consist of furnishing and erecting signs, lights, barricades, and devices as shown on the Plans or as required by the Engineer or as proposed by the Contractor and approved by the Engineer.

880.02. MATERIALS .

- (a) **Construction Signing and Traffic Control Materials.** Materials for construction signing and traffic control shall meet the applicable requirements of NCHRP #350 crash requirements and these specifications as follows:

1. *Arrow Display.* The arrow display shall consist of the following components:

- (1) Sign panel with yellow colored sealed beam lamps attached, meeting the requirements of Section 6F-3 of the Manual on Uniform Traffic Control Devices.
- (2) Circuitry control unit.
- (3) Mounting frame.

Panel. The face of the panels which are exposed to oncoming traffic shall be a nonreflective black finish.

Circuitry control unit. The level of intensity of light displayed by the lamps shall be changed through means of the control unit for either high intensity for day or reduced intensity for night operations. All lamps shall display essentially the same intensity of light for a given intensity setting.

Larger panels may be substituted for smaller panels at the discretion of the Contractor, but smaller panels may not be substituted for larger panels.

Mounting frame. The sign panel shall be supported on a mounting frame such that when displayed to oncoming traffic the bottom edge of the panel shall be not less than 7 feet (2.1 m) above the roadway surface. Mount the arrow display so that the panel can be rotated on a horizontal axis to be hidden from the view of on-coming traffic when not in use. Mount all mobile arrow displays on pneumatic-tired vehicles.